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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|---|-------------|--------------------------|------------------------------|------------------|
| 10/773,466  | 02/05/2004  | John Edward Ravensbergen | 10286.0358.NPUS00            | 7024             |
| 23369   | 7590        | 10/20/2005               | BJSC:35                      |                  |
| HOWREY LLP<br>C/O IP DOCKETING DEPARTMENT<br>2941 FAIRVIEW PARK DRIVE, SUITE 200<br>FALLS CHURCH, VA 22042-7195 |             |                          | EXAMINER<br>SMITH, MATTHEW J |                  |
|   |             |                          | ART UNIT                     | PAPER NUMBER     |
|   |             |                          | 3672                         |                  |

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/773,466

Applicant(s)

RAVENSBERGEN ET AL.

Examiner

Matthew J. Smith

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 16-22 and 26-31 is/are rejected.
- 7) ☒ Claim(s) 7-15, 23-25, and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 28Jul05, 5Feb04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

CL

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the phase separator (claim 15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 16-21, and 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Gianelloni, Jr. (3194325).

Gianelloni, Jr. discloses a bottom hole assembly flow control valve for a hydraulic motor comprising: a hydraulic motor having an element, rotor 14, or turbine shaft 7 that rotates at a speed in response to a power fluid defining the speed of the hydraulic motor; a valve 26 having a valve housing and a valve piston, the valve coupled to the hydraulic motor, the valve housing having a valve housing port 19, the valve piston having a valve piston port 25; the valve housing and valve piston moveable relative to one another and adapted to establish a bypass flow, through passage 19, when the valve housing and valve piston ports are at least partially aligned; an energizer or pump assembly 22, 23, 24 coupled to the valve and adapted to move the valve piston in response to the rotation of the element; the bypass flow of the working fluid through the housing and piston ports dependent on the speed of rotation of the element, the bypass flow reduced when the rotating element is below a predetermined speed of rotation, the bypass flow of the working fluid increased when the speed of rotation of the element is above the predetermined speed of rotation, the bypass flow proportional to the speed of rotation of the element up to a maximum bypass flow, and the bypass flow proportional

to a degree of alignment between the housing and piston ports (col. 3, lines 60-69); the relative movement of the valve housing and the valve piston is axial; and a downhole drill bit.

The reference also discloses a method of controlling the rotation of a downhole tool, comprising: attaching a downhole tool to a hydraulic motor, the motor having a rotating element that rotates in response to a flow of power fluid; providing a flow control valve having a valve housing and a valve piston, the valve coupled to the hydraulic motor; the valve housing having a valve housing port; the valve piston having a valve piston port, the valve housing and valve piston moveable relative to one another and adapted to establish a bypass flow when the valve housing and valve piston ports are at least partially aligned; and a pump assembly coupled to the valve and adapted to move either the valve housing or the valve piston in response to the speed of rotation of the rotating element such that the bypass flow of the working fluid through the housing and piston ports is dependent on the speed of rotation of the element; and injecting a flow of working fluid above the valve, the valve dividing the flow of working fluid flow between the flow of power fluid and the bypass flow proportional to the speed of rotation of the element; and providing a turbine having a turbine shaft the rotates at a speed in response to a flow of power fluid, and attaching the downhole tool to the turbine (col. 4, lines 12-65).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gianelloni, Jr. in view of Head (6557642).

Gianelloni, Jr. discloses a bottom hole assembly for performing an operation downhole, comprising: a hydraulic motor or turbine that has an element or turbine shaft 14 that rotates in response to a flow of a power fluid defining the speed of the hydraulic motor; a downhole tool 8; and a control valve 26 for controlling the speed of the hydraulic motor by directing working fluid through the bottom hole assembly, the control valve coupled to the motor and having a valve housing 27 having a housing port, through seat 27; a valve piston having a valve piston port 25; the valve piston and valve housing being moveably connectable to one another and adapted to establish a bypass flow when the valve housing and valve piston ports are at least partially aligned; and a pump assembly coupled to the valve and adapted to selectively increase the bypass flow when the motor speed is above a predetermined speed and to selectively decrease the bypass flow when the motor speed is below the predetermined speed (col. 3, lines 60-69) but not a de-scaling unit.

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Head teaches structure to create high flows is useful as a drilling tool or a descaling tool (col. 5, line 17).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the Giannelloni, Jr., structure for descaling, as taught by Head, since it is well known.

### ***Allowable Subject Matter***

Claims 7-15, 23-25, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stephens (4396071), Reinhart (4768598), Fehr et al. (6202762), Krueger et al. (6289998), Falgout, Sr. (6568485), Van Drentham-Susman et al. (6854953), and Oglesby (6920946) show valve structure including a by-pass passage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 9-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

MJS *MJS*

5 October 2005